37 CFR 1.121 (c) (i)

CLEAN VERSION OF THE CLAIMS

1. An ergonomic weight support device for a seat comprising:

a housing having an engaging channel;

a paddle having a pressure surface end, said pressure surface end being oriented towards a seat occupant, and said paddle having an engaged end, said engaged end being in extendible communication with said channel of said housing;

an actuator that mediates travel of said paddle between a substantially retracted position and an extended position; and

a pressure plate attached to said pressure surface end of said paddle.

2. An ergonomic weight support for a seat comprising:

a housing;

an paddle extendably engaged with said housing;

means for exending said paddle from a retracted position in said housing to an extended position;

a pressure plate; and

means for attaching said pressure plate to said paddle.

3. An ergonomic weight support apparatus for a seat comprising:

a housing having an arcuate channel defined by at least one guide boss;

an extending element having a pressure surface end, said pressure surface end being convex toward a seat occupant and being flexible in response to pressure, said extending element also having an arcuate encapsulated end slidingly disposed within said channel of said housing;

an actuator anchored to said housing;

a traction element having a first end engaged with said actuator and a second end in tractive communication with said arcuate encapsulated end of said extending element; and

a pressure plate attached to said pressure surface end of said extending element:

whereby said actuator mediates travel of said extending element between a retracted position and an extended, weight supporting position.

- 4. The ergonomic support of Claim 3 wherein said traction element is selected from the group consisting of: a wire, a bowden cable, a hard drawn wire, a pin, a rod, a bracket and a spoke.
- The ergonomic support of Claim 3 wherein said extending element is comprised of plastic.
- 6. The ergonomic support of Claim 3 wherein said housing is made of plastic.
- 7. The ergonomic support of Claim 3 wherein said pressure plate is made of plastic.
- 8. The ergonomic support of Claim 3 wherein said pressure plate has a medial axis that is attached to said pressure surface end of said extending element.
- 9. The ergonomic support of Claim 8 wherein said pressure plate has an upper edge and a lower edge, said upper edge and said lower edge being attached to said extending element only through said attachment of said medial axis.
- 10. The ergonomic support of Claim 9 wherein said pressure plate tapers from being thicker at said medial axis to being thinner at at least one of said upper edge and said lower edge.
- 11. The ergonomic support of Claim 8 wherein said medial axis is substantially horizontal.
- 12. The ergonomic support of Claim 3 wherein said pressure plate is curvilinear.

- 13. The ergonomic support of Claim 3 wherein communication between said extending element and said actuator is selected from the group consisting of: a piston, a screw, a rocker, a rack and pinion, a cam, a lever and a cantilever.
- 14. The ergonomic support of Claim 3 wherein said actuator is selected from the group consisting of: a hydraulic device, a pneumatic device, a bowden cable, an electric motor and a mechanical device.
- 15. The ergonomic support of Claim 3 wherein said pressure plate is substantially as wide as said pressure surface end of said extending element.
- 16. The ergonomic support of Claim 3 wherein said pressure plate is substantially greater in height than said pressure surface end of said extending element.
- 17. The ergonomic support of Claim 3 wherein said pressure plate is flexible.
- 18. A method of distributing the pressure of a lumbar support comprising:

Disposing an extendible pressure surface in a housing channel to travel from a retracted position to an extended position;

Mediating said travel with an actuator; and

Attaching a pressure plate to said extendible pressure surface.

19. The method of claim 18 wherein said pressure plate is flexible.